

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002021A. CLASSIFICATION OF SUBJECT MATTER
IPC: C12N-15/54, C12N-15/29, C12N-15/82, C12N-5/10, A01H-5/00, A01H-5/10, C12P-7/64

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC: C12N, A01H, C12P, C07, A61

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

: Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

Canadian Patent Database, DELPHION, USPTO, ESPACENET, PUBMED, GENBANK, GENESEQ
fatty acid, elongase, β -(or 3-) ketoacyl-CoA synthase, FAE1, KCS, erucic acid, *Nasturtium*, *Crambe*, *Limnathaceae*, *Tropaeolaceae*, *Simmondsia* (jojoba), *Linum* (flax), transgene, transgenic plant, SEQ ID NOs 22-27.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
X	KATAVIC, V. et al. Utility of the <i>Arabidopsis FAE1</i> and yeast <i>SLC1-1</i> gene for improvements in erucic acid and oil content in rapeseed. Biochemical Society Transactions. December 2000, Vol.28, No.6, Pages 935-937. Abstract; page 936, l.c, lines 2-8; figure 1; table 2; and page 937, r.c, lines 14-20.	1, 4-17 and 20-23
Y		3
X	KATAVIC, V. et al. Improving erucic acid content in rapeseed through biotechnology: What can the <i>Arabidopsis FAE1</i> and the yeast <i>SLC1-1</i> gene contribute? Crop Science. May-June 2001, Vol.41, No.3, Pages 739-747. Abstract; figure 1; page 745, r.c. lines 14-18; page 746, l.c. last paragraph to r.c. last paragraph	1, 4-17 and 20-23
Y		3

[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

- * Special categories of cited documents :
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search
15 February 2005 (15-02-2005)Date of mailing of the international search report
4 April 2005 (04-04-2005)Name and mailing address of the ISA/CA
Canadian Intellectual Property Office
Place du Portage I, C114 - 1st Floor, Box PCT
50 Victoria Street
Gatineau, Quebec K1A 0C9Authorized officer
Qianfa Chen (819) 994-1374

Facsimile No: 001(819)953-2476

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002021

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
X	CA 2,203,754 A1 (JAMES, A. et al.) 09 May 1996 (09-05-1996) Abstract; page 1, line 31 to page 2, line 2; page 3, line 27 to page 4, line 20; page 8, line 5 to page 9, line 20; and page 10, lines 26-28.	1, 4-9 and 12-23
Y		3
X	CA 2,463,166 A3 (WILMER, J. et al.) 24 April 2003 (24-04-2003) Abstract; page 3, lines 27-30; page 4, lines 24-27; page 5, lines 14-26; page 10, lines 16-21; and page 13, lines 22-27.	1, 2, 4, 5, 8-17 and 20- 23
Y		3
X	CA 2,337, 980 (WIENAND, U. et al.) 17 February 2000 (17-02-2000) Example 4	5-7
X	CA 2,292,770 (JAWORSKI, J. G. et al.) 10 December 1998 (10-12-1998) Examples 1 and 2	5-7
X,P	MIETKIEWSKA, E. et al. Seed-specific heterologous expression of a <i>Nasturtium FAE</i> Gene in <i>Arabidopsis</i> results in a dramatic increase in the proportion of erucic acid. <i>Plant Physiology</i> . September 2004, Vol.136, Pages 2665-2675.	1, 2, 4-9, 12-17 and 20- 23
A	CA 2,177,598 (METZ, J. G. et al.) 08 June 1995 (08-06-1995)	1-23
A	CA 2,411,247 (JAWORSKI, J. G. et al.) 13 December 2001 (13-12-2001)	1-23
A	CA 2,372,632 (SHORROSH, B. S.) 09 November 2000 (09-11-2000)	1-23
A	CA 2,285,970 (KUNST, L. et al.) 22 October 1998 (22-10-1998)	1-23

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CA2004/002021

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
CA2203754 A1	09-05-1996	AT276368T T AU703957 B2 AU3969959 A DE69533516D D1 EP0788542 A1 US6124524 A US6184355 B1 WO9613582 A1	15-10-2004 01-04-1999 23-05-1996 21-10-2004 13-08-1997 26-09-2000 06-02-2001 09-05-1996
CA2463166 A1	24-04-2003	EP1440154 A2 GB0124574D D0 HU0401838 A2 WO03033713 A2	28-07-2004 05-12-2001 29-11-2004 24-04-2003
CA2337980 A1	17-02-2000	AU748943 B2 AU5417299 A EP1100930 A1 WO0008172 A1	13-06-2002 28-02-2000 23-05-2001 17-02-2000
CA2292770 A1	10-12-1998	AU749114 B2 AU7721098 A EP0986296 A1 JP2002503961T T US6307128 B1 US2002066123 A1 WO9854954 A1	20-06-2002 21-12-1998 22-03-2000 05-02-2002 23-10-2001 30-05-2002 10-12-1998
CA2177598 A1	08-06-1995	CA2079113 A1 CA2123893 A1 CA2168042 A1 CA2292768 A1 CA2352473 A1 CN1053218C C CN1062902C C CN1129014 A CN1301304T T EP0529048 A1 EP0572603 A1 EP0711351 A1 EP0731840 A1 EP0986647 A1 EP1135474 A2 JP5506367T T JP7501221T T JP9501325T T JP9505739T T JP2002513293T T JP2002532089T T KR236483 B1 KR268752 B1 US5370996 A US5403918 A US5411879 A US5445947 A US5679881 A US5723747 A US6492509 B1 US6596538 B1 US6828475 B1 US2003228668 A1 WO0036095 A2 WO9214816 A1 WO9310241 A1 WO9515387 A2 WO9533055 A2 WO9855632 A1	23-08-1992 27-05-1993 07-12-1995 10-12-1998 22-06-2000 07-06-2000 07-03-2001 14-08-1996 27-06-2001 03-03-1993 08-12-1993 15-05-1996 18-09-1996 22-03-2000 26-09-2001 22-09-1993 09-02-1995 10-02-1997 10-06-1997 08-05-2002 02-10-2002 15-01-2000 01-11-2000 06-12-1994 04-04-1995 02-05-1995 29-08-1995 21-10-1997 03-03-1998 10-12-2002 22-07-2003 07-12-2004 11-12-2003 22-06-2000 03-09-1992 27-05-1993 08-06-1995 07-12-1995 10-12-1998
CA2411247 A1	13-12-2001	AU6829601 A EP1294898 A2 US6713664 B2	17-12-2001 26-03-2003 30-03-2004

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002021

US2004139498 A1 15-07-2004
WO0194565 A2 13-12-2001

CA2372632 A1	09-11-2000	AU4703400 A	17-11-2000
		EP1173583 A1	23-01-2002
		WO0066749 A1	09-11-2000

CA2285970 A1	22-10-1998	AU750707 B2	25-07-2002
		AU7019198 A	11-11-1998
		EP0975767 A1	02-02-2000
		US6274790 B1	14-08-2001
		US2002116735 A1	22-08-2002
		WO9846766 A1	22-10-1998

BEST AVAILABLE COPY